32717-PCT-USA - 065855.0132

Appl. No. 09/830,790

Amdt. dated Dec. 7, 2005

Reply to Office Action of Sept. 9, 2005

**PATENT** 

Amendments to the Specification:

Please replace page 1, line 25, with the following amended line:

adverting advertising activities in this month may increase prescription volume or market share

for

Please replace page 2, line 1, with the following amended line:

and each of them may have a different lag structure. Furthermore, the promotion lag

Please replace page 2, line 12, with the following amended line:

[[a]] vegetable compound data, see "An Exposition of the Box-Jenkins Transfer Function

Please replace the paragraph beginning at page 3, line 12, with the following amended

paragraph:

In order to achieve these objectives as well as others that will become apparent with

reference to the following specification, the present invention provides techniques for estimating

the impact of one or more promotions on product performance for a product are disclosed. In a

preferred embodiment, a method is presented which involves determining market events which

may impact product performance. Statistical descriptions are generated for the product

performance and promotion data. The market events product performance data is are examined

to detect any data abnormalities abnormal event and, if abnormalities abnormal events are

detected, generating a description for removing each detected abnormality abnormal event. A

relationship between each promotion and the product is then determined, and a promotion lag

structure between the promotions and product performance is systematically detected. Functional

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forms are selected to account for any the impact, if any, of the determined market events which

may impact product performance, and are evaluated to account, if necessary, for the determined

market event. The relationship between the promotions and product performance is quantified

by taking into account the selected functional forms.

Please replace page 4, line 26, with the following amended line:

account for other market inputs in the model. While [[as]] an exemplary embodiment of the

Please replace page 6, line 6, with the following amended line:

First, [[an]] a univariate auto-regressive model is fit to the promotion data "X"

Please replace the paragraph beginning at page 8, line 17, with the following amended

paragraph:

In step 270, the multiplicative or additive models specified in step 230 are fit to begin to

quantify the relationship between prescription variables and promotion variables, and other

market events and market inputs.

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NY02:533600.1

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Please replace the paragraph beginning at page 8, line 25, with the following amended

paragraph:

Finally, in In step 295, the model is evaluated and validated to examine the stability and

reasonableness of the model coefficients. For example, the model may be tested using the next

several months of data to validate the model. The model estimates of the variables are applied to

the next several months of data to compute sales, and are compared to actual sales.

Please add the following new paragraph after the paragraph that ends at page 8, line 29 with

"compared actual sales.":

Finally, in step 297, the evaluated and validated model is used to calculate the

incremental prescriptions attributable to promotions using the transfer function or impulse-

response weight values included in the evaluated and validated model.

Please replace the paragraph that begins at page 9, line 12 with the following amended

paragraph:

Previous work done by Helmer and Johansson, and Basara applied the transfer function

analysis to studying the promotional lagged effect, but failed to account for other market events

and market inputs such as new product launches, new indications approved, positive/negative

publicity, product price. As stated previously, this may result in inaccurate estimates of the

promotional effects. Others accounted for some of the market inputs but relied on past

experience and a "trail trial and error" approach to detect the promotional lag structure. The

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"trail trial and error" approach is time consuming and past experience may result in biased estimates because past experience may not be applicable to new promotional vehicles.